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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, THAN VINH

ART UNIT

PAPER NUMBER

2187

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/674,477	Applicant(s) KWON, YOUNG-SIG	
	Examiner Than Nguyen	Art Unit 2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-9,12-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-9,12-16,21,22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a response to the amendment, filed 11/17/08.
2. Claims 1,2,5-9,12-16,18-22 remain pending.

Response to Amendment/Arguments

3. In response to the amendment, the previous rejection to claims 1,2,5-7,9,12-16,22 under 35 USC 112, second paragraph, is withdrawn.
4. Applicant has amended claims 1 and 8 with new limitations not previously considered. The amended claims are addressed below.
5. Applicant's amendment and arguments filed 11/18/08 have been fully considered but they are not persuasive.
6. Applicant argues Kudo does not teach storing data in raw recording mode. This argument is unpersuasive. Raw recording, by definition, means recording data without processing/correction. Kudo teaches storing data to the recording medium without modification/processing (0202-0214). Thus, Kudo does teach storing data in raw mode.
7. Applicant argues Kudo does not teach generating the TOC based on the sub Q data (index). This argument is unpersuasive. Kudo teaches building the TOC based on sub Q data, which is timing indicator/index for the track (0011; 0196; 0205;0300; 0311).
8. Applicant argues Kudo does not teach detecting a subcode. This is unpersuasive Kudo teaches detecting subcode in the data (extracting subcode; 0095; 0120 reading sub Q data; 0207).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1,2,5-9,12-16,21,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kudo et al (US 2003/0156338 A1).

As to claim 1,8,21:

11. Kudo teaches a method and associated apparatus for recording record signals sequentially transmitted from a host on an optical recording medium, the method comprising:

receiving record data from the host and storing the data in a buffer if an environment data is set (receiving data in buffer/RAM and start command; 0096-0097; 0295);

building table of contents information wherein the building table of contents information includes: identifying the number of blocks if subq value exist among the record data stored in the buffer and interpret a subq value for each block (detect sub Q data; 0011-0012); and building the information on the optical recording medium using an index value in the subq value of the block (build TOC using Sub Q data; 0192, 0300, 0311); and

sequentially recording the data in raw recording mode(record to record medium without processing/correcting data; 0204-0214) on the lead-in region (store data to lead-in area; 0185-0186; 0196), a program region (store data tracks; 0202-0214), and a lead-out region (store data to lead-out region; 0204; 0211) of the optical recording medium. Kudo teaches the Sub Q data being 96 bits, not 16 bytes. One of ordinary skills in the art would recognize that the size of the Sub Q data is a design choice that would vary depending on the specific application. In this case, the size of the Sub Q data depends on the size of data on the optical disk. Thus, it would be

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obvious, by Office Notice, to one of ordinary skills in the art to implement the Sub Q data being 16 bytes, or any specific size, to fulfill the data size requirement of a specific application.

As to claim 2,9:

12. Kudo teaches notifying the host that the recording has been completed (complete recording signal; 0316, 0329).

As to claim 5,13,15:

13. Kudo does not specifically teach the index value being 8 bits. One of ordinary skills in the art would recognize that the size of the index of the Sub Q data is a design choice that would vary depending on the specific application. In this case, the size of the index depends on the size of data on the optical disk. Thus, it would be obvious to one of ordinary skills in the art to implement the index data being 8 bits, or any specific size, to fulfill the data size requirement of a specific application.

As to claim 6,14,16:

14. Kudo teaches data in the Sub Q identifying a first track number, last track number, or start address of the lead-out region (0328, 0330, 0333, 0364).

As to claim 7,12,22:

15. Kudo teaches identifying the number of blocks if sub code value exist among the record data stored in the buffer, interpret a Sub Q value for each block from the sub code (detect sub Q data; 0011-0012); and building the information on the optical recording medium using an index value in the sub code value of the block (build TOC using Sub Q data; 0192, 0300, 0311). Kudo does not teach the sub code being 96 bytes (Fig. 9, 10A, 10B). One of ordinary skills in the art would recognize that the size of the sub code data is a design choice that would vary depending

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on the specific application. In this case, the size of the sub code data depends on the size of data on the optical disk. Thus, it would be obvious, by Office Notice, to one of ordinary skills in the art to implement the sub code data being 96 bytes, or any specific size, to fulfill the data size requirement of a specific application.

Allowable Subject Matter

16. Claims 18-20 are allowed for reason indicated previously.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Than Nguyen/
Primary Examiner, Art Unit 2187

Than Nguyen
Primary Examiner
Art Unit 2187